

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

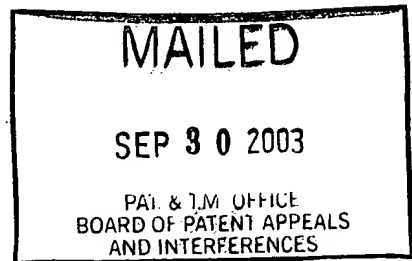
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Ex Parte RAINALD FORBERT,  
FRITZ SCHWERTFEGER  
and JOHANNES HARTEL

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Appeal No. 2003-1972  
Application 09/447,030

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ON BRIEF

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Before, KRATZ, JEFFREY T. SMITH and MOORE, *Administrative Patent Judges*.

JEFFREY T. SMITH, *Administrative Patent Judge*.

***Decision on appeal under 35 U.S.C. § 134***

Applicants appeal the decision of the Primary Examiner rejecting claims 13 to 24, all of the pending claims in the application.<sup>1</sup> We have jurisdiction under 35 U.S.C. § 134.

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<sup>1</sup> In rendering our decision we have considered Appellants' position present in the Brief, filed February 14, 2003 and the Reply Brief, filed July 07, 2003.

### ***THE INVENTION***

The Appellants' invention relates to a method for producing globular lyogels. According to Appellants, Brief page 2, "[a] lyogel (for example, a silica lyogel) can be formed by gelation of a corresponding lyosol." The specification discloses "the term[s] lyosol or lyogel must be understood to mean a sol or a gel in which the sol or gel interstices are filled with fluid. If the fluid consists essentially of water, then one speaks of a hydrosol or hydrogel." (Page 5). Claim 13 is illustrative:

13. A method of producing substantially globular lyogels in which the gel forming components are mixed to produce a lyosol, after which the lyosol, in order to form a lyogel, is introduced into a moving medium which flows substantially against the direction of the force of gravity and which does not perceptibly dissolve in the lyosol.

### ***THE REJECTIONS<sup>2</sup>***

The Examiner entered the following rejections: claims 13 to 24 unpatentable under 35 U.S.C. § 112, second paragraph; claims 13, 14 and 16 to 19 as

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<sup>2</sup> The Examiner relied on the following references in the prior art rejections:

Marisic	2,384,946	Sep. 18, 1945
Fernholz et al. (Fernholz)	3,939,199	Feb. 12, 1976
Bergna et al. (Bergna)	4,131,542	Dec. 26, 1978
Mielke et al. (Mielke)	5,656,195	Aug. 12, 1997

Grant and Hackh's Chemical Dictionary, 5<sup>th</sup> ed. (1987), p. 258.

Perry et al, Chemical Engineers' Handbook, 5<sup>th</sup> ed. (1973), pp. 20-58 to 20-63.

The American Heritage Dictionary, Second College Edition,(1982) 920.

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unpatentable under 35 U.S.C. § 102(b) as anticipated by Bergna with Grant and Hackh's Chemical Dictionary and the Engineer's Handbook to show inherent state of fact; claims 13, 14 and 16-22 as unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Bergna, Grant and Hackh's Chemical Dictionary and the Engineer's Handbook; claims 13-24 as unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Marisic, Fernholz and optionally Mielke. (Answer, pp. 3-9).

### ***OPINION***

#### **The Rejection under Section 112, second paragraph**

The relevant inquiry under 35 U.S.C. § 112, second paragraph, is whether the claim language, as it would have been interpreted by one of ordinary skill in the art in light of the Appellants' specification and the prior art, sets out and circumscribes a particular area with a reasonable degree of precision and particularity. *See In re Moore*, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971).

We have carefully reviewed the claims and specification, including all of the arguments advanced by both the Examiner and Appellants in support of their respective positions. This review leads us to conclude that the rejection of claims 13 to 24 under 35 U.S.C. § 112, second paragraph, is well founded.

It is the Examiner's position that the claimed subject matter is indefinite in that, "it is unclear what is required by 'perceptibly'. As defined by the American Heritage Dictionary, . . . 'perceptibly' is capable of being perceived', thus, it is unclear if the limitation of 'perceptibly dissolves in the lyosol' requires that the vapor atmosphere has to dissolve in the lyosol or only appears to dissolve in the lyosol (but actually not dissolve)." (Answer, p. 4). The Examiner also asserts that "[t]he phrase 'does not perceptibly dissolve' is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention." (Answer, p. 4).

Appellants assert that the disputed language would have been well recognized by persons skilled in the art. Specifically, Appellants state:

The meaning of the phrase "does not perceptibly dissolve in the lyosol," as recited in claim 13, is well recognized by those skilled in the art. It is well established that if the meaning of a term used in a claim is understood by one of ordinary skill in the art, then the term is considered to be sufficiently definite to meet the requirements of § 112.

The word "perceptibly" is a well-recognized word in the chemical arts and is widely used in US patents.  
[Brief, p.5]

Appellants in the Reply Brief, page 2, state "the person of ordinary skill in the art, in performing the process defined by claim 13, would use a medium that does not

perceptibly dissolve in the lyosol, i.e., a medium that does not dissolve to an extent or degree distinctly discernible, noticeable or measurable.” Further Appellants argue that “even if the term ‘perceptibly’ does have relative meaning, a term having relative meaning is not indefinite *per se*. The fact that claim language may include terms of degree does not automatically render the claim indefinite under 35 U.S.C. § 112, second paragraph. *See Seattle Box Co. v. Industrial Crating & Packaging, Inc.*, 731 F.2d 818, 221 USPQ 568(Fed. Cir. 1984). Acceptability depends on whether one skilled in the art, in view of the specification would understand what is claimed.” (Reply Brief, p. 2).

The Examiner in the Answer expressly questions when and how this perception occurs. Specifically the Examiner states “Appellants, however, do not provide any guideline[s] in the specification as to how or to what degree the medium can be ‘perceived’ as not being dissolved in the lyosol, i.e., ‘perceived’ by the naked eye, by microscope, or when the medium would be ‘perceived’ as being dissolved in the lyosol? When more than 5%, 10%, 50% or 75% of the medium is actually dissolved in the lyosol.” (Answer, pp. 9-10).

Appellants response in the Reply Brief has not directed us to evidence in the specification that indicates the conditions of the perception. As stated above, Appellants urge that a medium does not dissolve to an extent or degree distinctly

discernible, noticeable or measurable. However, Appellants have not specified the conditions of perception. Appellants have left open the door of speculation for determining the various forms of perception which are required by the claimed invention.<sup>3</sup>

Appellants' arguments regarding the use of terms of degree are not persuasive. It is true that terms of degree must be interpreted in light of the specification and are not *per se* indefinite. However, in the present case the disputed language is indefinite because the specification does not provide some standard for measuring that degree. Specifically, the specification in this case attempts no definition of the claim language "perceptibly dissolves in the lyosol." Appellants apparently concede as much, arguing that "Applicants are not required to provide one-to-one correspondence between the terms of the specification and the terms used in the claims." (Reply Brief, p. 3). However, they have not referred us to any standard work on chemistry which indicates that the commonly accepted technical meaning of the words "perceptibly dissolves in the lyosol". *In re Barr*, 444 F2d 588, 596, 170 USPQ 330, 338 (CCPA 1971). For these reasons, the rejection of claim 13 on the ground that it is indefinite will therefore be sustained.

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<sup>3</sup> We will not attempt to speculate on the detection methods encompassed by the claims. We do note that several conditions, atmosphere, lighting and equipment have not been specified by Appellants.

Thus, for the above stated reasons, we affirm the rejection of claims 13 to 24 unpatentable under 35 U.S.C. § 112, second paragraph.

**The Rejection under Sections 102 and 103**

The Examiner rejected claims 13, 14 and 16 to 19 as unpatentable under 35 U.S.C. § 102(b) as anticipated by Bergna with Grant and Hackh's Chemical Dictionary and the Engineer's Handbook to show inherent state of fact; claims 13, 14 and 16-22 as unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Bergna, Grant and Hackh's Chemical Dictionary and the Engineer's Handbook; and claims 13-24 as unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Marisic, Fernholz and optionally Mielke.

We reverse the aforementioned 35 U.S.C. §§ 102 and 103 rejections on procedural grounds.<sup>4</sup>

Appellants, in arguing the patentability of the claimed subject matter over the cited prior art, rely on the subject matter that we have indicated is indefinite. For example, in arguing patentability over Bergna, Appellants state: "This simply fails to disclose forming a lyogel by introducing a lyosol into a moving medium which flows substantially against the direction of the force of gravity and which does not perceptibly dissolve in the lyosol." (Brief, p. 6). (underlining added). Appellants

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<sup>4</sup> We emphasize that this reversal is a technical reversal rather than one based on the merits.

when discussing the Marisic reference state “[t]here is no teaching or suggestion in Marisic that a lyosol be introduced into a moving medium which does not perceptibly dissolve in the lyosol.” (Brief, p. 10). (underlining added). As stated above, we determined that one skilled in the relevant art would not be able to ascertain the scope of claim 13 because no reasonably definite meaning can be ascribed to the language appearing therein. The subject matter of claim 13 is directed to a method of producing substantially globular lyogels. The claimed subject matter specifies that the lyosol is introduced into a moving medium which does not perceptibly dissolve in the lyosol. Thus, we are of the opinion that Appellants do not particularly point out and distinctly claim the subject matter which they regard as invention in a manner such that a skilled person would be able to determine the metes and bounds of the claimed invention with the precision required by the second paragraph of 35 U.S.C. § 112. *See In re Hammack*, 427 F.2d 1378, 1382, 166 USPQ 204, 208 (CCPA 1970). For reasons stated *supra* in our affirmance of the rejection under the second paragraph of 35 U.S.C. § 112 no reasonably definite meaning can be ascribed to certain language appearing in the claims. As the court in *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970) stated:

[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art. If no reasonably definite meaning

can be ascribed to certain terms in the claim, the subject matter does not become obvious -the claim becomes indefinite.

In comparing the claimed subject matter with the applied prior art, it is apparent to us that considerable speculations and assumptions are necessary in order to determine what in fact is being claimed. Since a rejection based on prior art cannot be based on speculations and assumptions, *see In re Steele*, 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA 1962), we are constrained to reverse, pro forma, the Examiner's prior art rejections of claims. We hasten to add that this is a procedural reversal rather than one based upon the merits of the 35 U.S.C. § 103 rejection, as noted above.

#### ***OTHER ISSUES***

We note that the specification, page 4, provides a description of DE-C-2103243. According to the description this reference indicates that the medium does not noticeably dissolve in the hydrosol. In the event of further prosecution, the Examiner should obtain an English language translation of DE-C-2103243 to evaluate the patentability of Appellants' claimed subject matter.

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### Time for taking action

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

**AFFIRMED**

  
PETER F. KRATZ  
Administrative Patent Judge

  
JEFFREY T. SMITH  
Administrative Patent Judge

  
JAMES T. MOORE  
Administrative Patent Judge

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